



## APPENDIX A

## MARKED-UP VERSION OF AMENDED CLAIMS

1. (Amended once) A method of forming sidewall spacers adjacent opposing vertical sides of a gate electrode, comprising:

forming at least one gate electrode over a substrate;

forming, at a first temperature in a range of approximately 550°C to 580°C, a first silicon oxide film conformally over the substrate and gate electrode from a combination of gases including bis-(tertiarybutylamino)silane and oxygen;

forming, at a second temperature in a range of 580°C to approximately 600°C, a silicon nitride film conformally over the first silicon oxide film from a combination of gases including bis-(tertiarybutylamino)silane; and

forming a second silicon oxide film over the silicon nitride film from a combination of gases including bis-(tertiarybutylamino)silane and oxygen.

- 2. (Amended once) The method of Claim 1, wherein <u>said</u> forming the first silicon oxide film comprises providing one or more wafers in a furnace at [a] <u>the</u> first temperature[,] and flowing BTBAS and oxygen into the furnace.
- 3. (Amended once) The method of Claim 2, wherein[,] said forming the silicon nitride film[,] and the second silicon oxide film comprises keeping the one or more wafers in the furnace.

- 4. (Amended once) The method of Claim 2, wherein <u>said</u> forming the silicon nitride film comprises maintaining the one or more wafers in the furnace at [a] <u>the</u> second temperature[,] and flowing BTBAS and NH<sub>3</sub> into the furnace.
- 5. (Amended once) The method of Claim 4, wherein <u>said</u> forming the second oxide film comprises maintaining the one or more wafers in the furnace at the first temperature and flowing BTBAS and oxygen into the furnace.
- 7. (Amended once) The method of Claim 1, further comprising[,] <u>purging the</u>
  <u>furnace</u> prior to forming the [film] silicon nitride film and subsequent to forming the first
  oxide film[, purging the furnace].
- 8. (Amended once) The method of Claim 7, wherein <u>said</u> purging the furnace comprises ceasing the flow of BTBAS and oxygen, and flowing  $N_2$  into the furnace.
- 9. (Amended once) The method of Claim 1, further comprising[,] <u>purging the</u>
  <u>furnace</u> prior to forming the second oxide film and subsequent to forming the silicon nitride film[, purging the furnace].
- 10. (Amended once) The method of Claim 9, wherein <u>said</u> purging the furnace comprises ceasing the flow of BTBAS and NH<sub>3</sub>, and flowing N<sub>2</sub> into the furnace.

11. (Amended once) A method of forming a transistor, comprising:

forming at least one gate electrode over a gate dielectric layer, the gate dielectric layer disposed on a substrate;

depositing a first silicon oxide film conformally over the substrate and gate electrode from a combination of gases comprising bis-(tertiarybutylamino)silane and oxygen at a temperature of between approximately 550°C and 580°C;

depositing a silicon nitride film conformally over the first silicon oxide film from a combination of gases comprising bis-(tertiarybutylamino)silane and ammonia at a temperature of between 580°C and approximately 600°C;

depositing a second silicon oxide film over the silicon nitride film from a combination of gases comprising bis-(tertiarybutylamino)silane and oxygen; and forming a first sidewall spacer.

- 12. The method of Claim 11, wherein the first silicon oxide, the silicon nitride, and the second silicon oxide are deposited in-situ.
- 13. The method of Claim 11, wherein depositing the first silicon oxide, the silicon nitride, and the second silicon oxide are all done in a first furnace.
- 14. (Amended once) The method of Claim [13] 11, wherein the [first] furnace is a vertically oriented furnace and the BTBAS, the oxygen, the nitrogen, and the ammonia[,] each flow into the furnace from a bottom of the [vertically oriented] furnace.

- 15. (Amended once) The method of Claim 11, further comprising implanting dopants to form a [of] deep source/drain region in the substrate adjacent at least two opposing sides of the gate electrode.
- 16. (Amended once) The method of Claim 14, wherein <u>said</u> forming [a] <u>the</u> first sidewall spacer comprises anisotropically etching the second silicon oxide layer, the silicon nitride layer, and the first silicon oxide layer.
- 17. (Amended once) The method of Claim 16, further comprising removing the second oxide layer [so as] to form L-shaped spacers.
- 19. (Amended once) The method of Claim [17] 18, wherein said implanting dopants includes a partial passage of ions from an ion beam through a portion of the L-shaped spacers.